

**AMENDMENTS TO THE CLAIMS:**

1-6. (Cancelled)

7. (Currently amended) A heat sink for cooling a component, the heat sink comprising:

a tubular body formed from a single extrusion of thermally conductive material having an interior surface and an exterior surface, at least a portion of the exterior surface ~~being defining a substantially flat side that defines a plane oriented generally tangential to the tubular body; and contacting the component to remove heat from the component; and~~

a plurality of internal fins extending from the interior surface of the tubular body;  
and

~~wherein the heat sink has a mounting ridge extending from the flat side and oriented generally perpendicular to the flat side, the mounting ridge receiving for mounting a clip to hold the component substantially perpendicular against the substantially flat portion side of the tubular body.~~

8-12. (Cancelled)

13. (Currently amended) A heat sink assembly for cooling a component on a circuit board, the heat sink assembly comprising:

a tubular body formed from a single extrusion of thermally conductive material having an interior surface, an exterior surface, at least a portion of the exterior surface ~~being defining a substantially flat side that defines a plane oriented generally tangential to the tubular body; and contacting the component to remove heat from the component;~~

a plurality of internal fins extending from the interior surface of the tubular body;  
and

a fan adjacent to an open end of the tubular body to force ambient air through the tubular body;

a circuit board having one end attached to the flat side of the tubular body such that the circuit board extends generally perpendicular to the flat side of the tubular body, the circuit board having a component attached thereto;

wherein the tubular body has a mounting ridge extending from the flat side of the tubular body and oriented generally perpendicular to the flat side of the tubular body such that the mounting ridge extends generally parallel to the circuit board; and for mounting a clip to hold the component substantially perpendicular against the substantially flat portion of the tubular body

a mounting clip having one end received by the mounting ridge and a second end contacting the component to retain the component against the flat side of the tubular body.

14-19. (Cancelled)

20. (Currently amended) A cooktop comprising:

a cooking plate;

a plurality of heating units mounted below the cooking plate;

a controller housing unit mounted below the cooking plate;

a circuit board for controlling the heating units, the circuit board having a plurality of components, the circuit board mounted inside the controller housing unit;

a heat sink assembly for cooling the plurality of components of the circuit board, ~~the heat sink assembly attached to the circuit board~~, the heat sink mounted inside the controller housing unit, the heat sink assembly having

a tubular body formed from a single extrusion of thermally conductive material having an interior surface, an exterior surface and two open ends;

a plurality of internal fins extending from the interior surface of the tubular body; and

a fan adjacent to one of the two open ends of the tubular body to force ambient air through the tubular body;

wherein the exterior surface of the tubular body defining at least one generally flat side defining a plane oriented generally tangential to the tubular body, the circuit board having one end connected to the flat side such that the circuit board extends generally perpendicular to the flat side of the tubular body, wherein the flat side contacts the plurality of components to remove heat from the components;

wherein the tubular body has a mounting ridge extending from the flat side of the tubular body and oriented generally perpendicular to the flat side of the tubular body such that the mounting ridge extends generally parallel to the circuit board; and for mounting

a plurality of clips to hold the plurality of components substantially perpendicular against the exterior surface flat side of the tubular body, each of the clips having a first end received by the mounting ridge and a second end contacting a respective component.

21. (Cancelled)
22. (Currently amended) The heat sink assembly of ~~claim 24~~claim 13, wherein the internal fins are arranged in a plurality of sets, with the internal fins of each set extending in parallel to varying lengths.
23. (Currently amended) The heat sink assembly of claim 22, wherein the internal fins are generally symmetric around a center line of the tubular body.
24. (Currently amended) The heat sink assembly of claim 23, wherein the fins in a center of a set are longer than the fins at an edge of a set.
25. (Currently amended) The heat sink assembly of ~~claim 24~~claim 13, further comprising a plurality of exterior fins extending from the exterior surface of the tubular body.
26. (Currently amended) The heat sink assembly of claim 25, further comprising a fan positioned adjacent to an open end of the tubular body.
27. (Canceled)
28. (Previously presented) The heat sink of claim 7, wherein the internal fins are generally symmetric around a center line of the tubular body.

29. (Previously presented) The heat sink of claim 28, wherein the fins in a center of a set are longer than the fins at an edge of a set.

30. (Previously presented) The heat sink of claim 7 further comprising a plurality of exterior fins extending from the exterior surface of the tubular body.

31. (Previously presented) The heat sink of claim 30, further comprising a fan positioned adjacent to an open end of the tubular body.

32-38. (Cancelled)

39. (Previously presented) The cooktop of claim 20, wherein the internal fins are generally symmetric around a center line of the tubular body.

40. (Previously presented) The cooktop of claim 39, wherein the fins in a center of a set are longer than the fins at the edge of a set.

41. (Previously presented) The cooktop of claim 20, further comprising a plurality of exterior fins extending from the exterior surface of the tubular body.

42. (Previously presented) The cooktop of claim 41, further comprising a fan positioned adjacent to an open end of the tubular body.